REVIEW OF REHABILITATION SERVICES IN MANITOBA 1989

DR. WILLIAM MacDIARMID

July 28, 1989

Manitoba Health

Manitoba

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Health

Health Services Commission
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The Honourable Donald W. Orchard
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Dear Mr. Orchard:

I have completed the report of the review of rehabilitation services. The interviews and meetings extended principally from January through June, 1989. The succeeding works have been devoted to collating the information and writing the report.

In addition to the specific acknowledgements in the report, I would like to comment that I greatly enjoyed the encounters with people in government, various institutions, professional and consumer groups and others. I was treated with great courtesy and provided with the information that I requested.

Please call upon me if you wish me to make further comments or clarifications.

Yours truly,

W.D. MacDiarmid, M.D.
Review of Rehabilitative Services

WDM/dk

ACKNOWLEDGEMENTS

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A particular debt of gratitude is owed to those many people who, with great good will, provided information and opinions in writing and in discussions. All errors and omissions can be attributed to the conductor of the review.

W. D. MacDiarmid, M.D.
21 July 1989

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REVIEW OF REHABILITATION SERVICES IN MANITOBA, 1989

1. Introduction:

1.1 Purpose:

In March 1989, The Minister of Health, the Honourable Donald W. Orchard, formally announced that a review of rehabilitation services in Manitoba would be conducted by W. D. MacDiarmid, M.D. Dr. MacDiarmid was appointed to provide a broad overview of rehabilitation needs, and to address the issues of universality of access to rehabilitation services, the supply of qualified professionals and the organization and deployment of services (see Appendix A for details).

1.2 Methodology and Procedures:

Although the review was not formally announced until March 1989, preliminary discussions with senior Manitoba Health officials occurred in November and December 1988. Approval to begin the review was received in late December. The review relied primarily upon interviews with interested and involved individuals, groups, organizations and facilities. These meetings continued through late June, 1989.

In nearly all instances, these encounters took place on the premises of the interviewees, except for a few instances when there was a request for a meeting at the Research and Planning Directorate, Manitoba Health, or members of a (usually professional association or regulatory) group who were located in several sites chose a place in a hospital, government office or elsewhere. For a number of reasons, this arrangement proved to be beneficial. It afforded the reviewer a closer view of the operations or situation and avoided the possible perception of anyone being summoned to appear. The meetings arose from one or other or both of the following approaches:

1. A list was made of potential interviewees of whom meetings were requested; or
2. Letters were sent to many consumer groups (or their advocates), providers of services and organizations through (or in) which services are provided, to inform them that the review was in prospect, and to request briefs and/or suggested meetings.

More travel to the regions outside Winnipeg would have been desirable but was not possible due to time constraints. For those places not visited, much valuable information was obtained from other sources (eg. C40), notably from the Submission to the Manitoba Health Services Commission (MHSC) Board by the Rural Health Facilities Division, MHSC, entitled Regionalization of Therapy Services - Implementation Plan (D26) dated 24 May 1989. In addition to time, the reviewer is also aware that there are limits

to what can be expected in view of the particular talents, background, approach and attitudes of one person.

Much statistical and quantitative data are available and will be cited later. To the extent that they are germane and broadly consistent with one another in the context of the Province of Manitoba, the information in them will be utilized and given such weight as appears to be appropriate. Other information about what the needs are, the extent to which those needs are met, by whom and in what manner, is drawn from the interviews and various supporting documents. Usually, these will be identified in Appendices or Reference Documents.

1.3 Scope of the Review:

It was initially intended to encompass principally physical impairments for which treatment was required by such professionals as physiotherapists, occupational therapists, audiologists, and speech/language pathologists. Such an approach would be largely confined to those measures which are employed in order to overcome or compensate for the most obvious effects of a person's illness, injury or handicap.

It became apparent that the issues are much broader. The full scope of rehabilitation includes all measures and all disciplines employed to assist an individual to regain or attain the best

possible functional and psychosocial adjustment and achieve as much independence as possible in living in the community.

From the previous statement it will be appreciated that social workers, psychologists, psychiatrists, and many other professionals together with family members and friends, within institutions, at home and in work and recreational settings all contribute significantly to rehabilitation. The full exploration of all of these facets is beyond the scope of this review, but some information and commentary have been included.

It is well to record that rehabilitation services in Manitoba not only possess many areas of strength but, in many respects, they have been innovative and exemplary. The quality, particularly in Winnipeg and in certain well-established programs, has been excellent. Problems are associated with quantitative and distributive aspects. In common with many health services, there have been many advances in rehabilitation. They have resulted in an expansion of the quantity and range of available and effective means of assistance and service. If personnel and resources are not increased to address the expectations and demand, then a shortfall occurs. Some potential users get little or no service.

2. Assessment of Needs

2.1 Introduction

During the review, there were several encounters with consumers, many of whom are active as advocates and/or organizers of measures to meet perceived needs. Several parents and friends of children with handicaps provided useful information. Before identifying deficiencies and problems in the provision or delivery of services, an attempt will be made to convey something of the range and variety of individuals who require rehabilitation.

Some individuals or groups may be disadvantaged by comparison with others. For example, someone with a mental handicap may appear to be helped differently from one who has a physical problem. It may appear that it is more likely that rehabilitation services will be provided following physical injury than following an illness which impairs neuromuscular or joint function. Different levels of service may be available for such groups as those who suffer the consequences of industrial accidents or strokes or muscular dystrophy or chronic lung disease.

Subdividing consumer groups is unavoidable for several reasons. Prescribing a rehabilitation program, i.e. identifying and mandating what measures are required and by whom they may best be provided depend upon detailed assessment.

Consumers/patients/clients must be involved through the provision of information and in decisions about treatment.

A comprehensive assessment of a particular person's need for rehabilitation requires consideration of many factors. Attempts are made to ascertain details and to classify each problem for the purpose of recommending an approach to therapy. Any given approach may result in bias or prejudice, such as to appear to benefit one potential recipient or service while doing less or delaying or denying benefit for another. Such variability would seem contrary to the principles of universality and equity.

A classification which takes into account cause (etiology), type of disease process (pathophysiology), location and extent of injury, and potential for benefit from rehabilitation measure appears to be unavoidable, although some consumer groups claim that it serves providers and institutions better than it does consumers, unless subject to various qualifiers and disclaimers. For instance, in several contexts, some age groups appear to be served better than others.

2.2 Multifactorial Classification

(1) Is the problem congenital (and often lifelong) or acquired (through illness or injury)?

(2) What is the cause?

- trauma
- infection
- inflammation
- degeneration
- metabolic
- neoplasm (tumor)
- etc

(3) What structures and functions are affected?

(4) Is it acute or chronic, subject to cure or improvement, static or progressive, etc.

(5) What are important associated circumstances?

- other health problems
- social/family/marital
- economic and occupational
- psychological/psychiatric
- age
- residence: urban vs rural
  institution vs home
- etc

2.3 Relative Advantage or Disadvantage in Competing for Services

Very simply stated, some patients/clients receive adequate rehabilitation services while many do not. In virtually all of the interviews, one or more groups were identified as being relatively disadvantaged. This came as no revelation. Indeed, virtually all

of the appended and reference sources allude to unmet or only partially met needs. In this report, some of the specific shortfalls will be cited. To achieve brevity, some groups may appear to be omitted or given insufficient prominence. It would be a difficult task to assign correct assessment of extent and urgency to the various groups and even harder to decide which ones are more or less deserving of prior ranking (D19, D25, D26).

(1) Age Factor

Most sources would agree that the elderly fare less well than young or middle-aged adults. Probably, children do as well as adults or slightly better, in some contexts. Among children, those in the pre-school period are disadvantaged compared with those of school age. Age differences may be compounded by combinations of other factors to be described in the following sections.

(2) Place of Residence

In common with most health, social and other services, access is generally easier in Winnipeg than elsewhere in Manitoba, with certain exceptions related to other factors stated below. Suffice it to state, at this point, that people outside Winnipeg will experience greater difficulties accessing services if they are also far from another treatment centre and if they live in the north or mid-portions of the province or lack good highways.

(3) Ethnic Origin

Native people, particularly in remote communities have many obstacles to face, such that rehabilitation services for all ages and for all kinds of disabilities are less well provided than for the majority of the population. This will be addressed in succeeding segments of the report. Various groups of new Canadians have a certain amount of difficulty accessing health care on account of the barriers of language and differences in education and culture, as well as past experience and expectations.

(5) Acuity and Duration

There is the perception that people who have an acute, short-term injury or illness are more likely than other groups to receive relatively prompt and effective treatment of sufficient duration to assure a good outcome. If the problem is life-long, chronic or deemed to be only marginally amenable to rehabilitative measures, the response is less prompt and deliberate. While that may seem practically necessary and justifiable to some extent, such an approach may deny help to many people who, if not curable, might achieve a much better adjustment and quality of life if rehabilitation measures were applied. Some of the specific groups are identified later in this segment and elsewhere.

(5) Mental vs. Physical Disability

It may seem that traditional rehabilitation therapies have primarily addressed physical dysfunction. However, there is considerable need to develop, enhance or restore various, often apparently very simple skills in mentally handicapped or mentally ill people. For many of them, the lack of very elementary coping skills of everyday living can relegate them to a high level of dependency which might be overcome by the intervention of an occupational therapist, aided by other supporting professionals and family, friends or volunteers.

(6) Site of Referral/Place of Residence

Generally, patients in acute care facilities are more likely to get prompt, effective treatment than those who have recently been discharged from hospital or those who were never in-patients. To the extent that this represents a reasonable measured response to greater vs lesser needs, it is tolerable, but it is sometimes seen as a too rigidly applied practice with too little variation for particular needs. Likewise, users in acute care facilities are at an advantage compared with those in personal care homes or at home.

A comprehensive assessment of rehabilitation needs for a person will encompass several more major items and many other details than have been listed. The foregoing may help to indicate the complexity. There is frequent need for highly specialized services and to mandate and coordinate the services of several kinds of providers. For example, a person who has sustained paraplegia after an industrial accident may very well require the help of a physiotherapist, an occupational therapist, a psychologist, and a social worker as well as services of doctors, nurses, pastoral care workers and a host of consultants and technicians as well as others too numerous to mention. All have important contributions to make so as to assure that the injured person can attain the best possible level of function and enjoyment of independent living.

At the present time, there is an inefficient means of deciding how competing needs might be met. Undoubtedly, when resources are too limited to satisfy fully all the demands, deployment should address those with the greatest needs and greatest probability of benefit extending for the longest time. A child recovering from burns will take precedence over an octogenarian with motor neuron disease, if only one can have service. There is a very large problem, however, if there are virtually no services for the elderly or for people with progressive disorders. They appear at this time to be among the least advantaged. There are other groups and categories who have fared poorly, because of maldistribution. The current state of proliferation of institutions, groups and pathways has not provided the solution. Some local,

comprehensive approach to the assessment and coordination of all health-related services may significantly address and improve upon the current, largely centralized but uncoordinated approach.

There are differences in the ranges of rehabilitation needs in the different communities and regions of Manitoba. Elderly people are proportionately more numerous in Westman than in and around Thompson. Children with multiple handicaps in the North are far less likely to have a skilled, timely assessment of their problems and needs than similarly handicapped children in Winnipeg. In the near term, development and strengthening of regional and local teams are required to assess, priorize and address rehabilitation requirements. Numbers are available in several contexts but often there is a failure of ascertainment. In other words, if the child with multiple handicaps or older person with moderate disability from a stroke remains at home, without any advocate, she or he often will be omitted from the reckoning. There is much to suggest that more potential users will continue to be added, with a resultant increased demand for help. One measure and means of forecasting would be to follow trends in diagnoses for hospital separations and for submitted accounts for physicians' services. As physicians, nurses, and others become more aware of what rehabilitation services can and should be provided in various circumstances, better assessments and projections of need will be possible. The rapid but still incomplete development of hearing and speech programs, for both diagnosis and management, are convincing demonstrations of this trend.

3. Assessment of Services

3.1 Introduction:

Rehabilitation needs were explored in the preceding section. It is necessary to determine what deficiencies exist in services. Specifically it will be necessary to consider:

1. Types of therapists required, along with complementary and support personnel.
2. The number of each discipline required.
3. Deployment and assignment of therapy personnel:
   - Institutional/fixed base vs home/travelling.
   - By program (e.g. stroke, spinal injury) or across all (or most) programs.
   - Centralized vs local/regional.
   - To serve various age groups.
   - Other variations and combinations.
4. Organization and control:
   - Central vs local/regional.
   - Institutional vs community-based.
   - Unidisciplinary vs team/program.
   - By age criteria--eg. pre-school, school-aged, mainstream, and elderly.
   - By diagnostic or functional group--eg. mentally ill, multiply handicapped, vision impaired, etc.

Items (1) and (2) will be mainly addressed in Section 4, but mentioned in relevant contexts in this section.

During the interviews, it became apparent that services are not uniformly and fairly available to many of those who require them, as has been partly stated in Section 2. There are many programs, organizations and mechanisms by which services are provided and grouped. In fact, the number and variety of arrangements are bewildering (Appendix E). It is probable that each represents a response to a particular demand or perceived need. Diversity is not necessarily bad if disparate needs are being met by different programs, eg. speech/hearing-impaired children, or people with chronic mental illness or amputees. On the other hand, in a sparsely populated area (or even in a city), classifications which are too exclusive tend to leave some (or many) users without service. That situation leads to more insistent demands to help disfranchised (unfranchised) groups, eg. chronic arthritics, speech-impaired pre-school and/or elderly persons and many persons who have been injured in motor vehicle accidents.

3.2 Current Rehabilitation Services:

3.2.1 Pre-School-Aged Children

Several public health nurses, parents, consumer advocates, a few physicians and others stated that there are often delays in making diagnoses and assessments. While it is true that hearing impairment tends to be discovered at a much earlier age than formerly, suitable assistance and therapy to

address the deficits in hearing and speech are often delayed (D2, D29, D30). The disruptive and frustrating consequences for the affected child, the parents, family and teachers are very considerable if no action is taken before the child enters kindergarten. It is true that speech and language pathologists (therapists) are present in insufficient numbers to help such children. Also, rural children have fewer prospects for help than those in Winnipeg, and native children, who have a higher frequency of hearing loss through infection, are highly unlikely to have their needs ascertained, let alone treated.

A very high quality of service usually results when children are seen by the Child Development Team at the Winnipeg Childrens' Hospital, either on site or in the course of one of its travelling clinics. However, not all children in need are referred in a prompt or timely fashion. Furthermore, it is difficult to provide needed services where handicapped children live in rural settings, so there is often a need for the child and at least one parent to spend time in Winnipeg to obtain help. Such travel is expensive for the health insurance plan and family, and it disrupts family and community relationships. Again, there is a correspondingly greater impact upon native people.

Because of the small number of therapists based in rural Manitoba, it is not possible that existing services could be

adequate. Also, there will be a tendency to treat patients in hospital or those who have been recently discharged, and who reside nearby and have acute transitory problems, instead of people in the community with chronic longer-standing problems and who live at a distance, particularly if those in need have not had their requirements strongly mandated. Further barriers may arise from social, economic, cultural or linguistic factors.

Special needs of children with mental retardation, many of whom have physical disabilities, have been addressed through a program known as Children's Special Services under the Department of Family Services. The program was intended to address some of the problems cited above and undoubtedly it has. The Mobile Therapy component utilizes "paraprofessionals" which is commendable in a rural setting, given the relative unavailability of professional therapists. However, this whole effort represents yet another of the many departments and programs of the Government of Manitoba which are intended to address various rehabilitation needs and between which communication and coordination are less than adequate. Also there is an imbalance favouring central over local control. This may (probably does) inhibit the development of imaginative local coping and collaborative approaches because various groups currently working at the local level tend not to address problems outside their territory. It probably impedes

progress toward a larger, permanently-based local or regional group of therapists.

The Society for Manitobans with Disabilities operates a most effective pre-school program in Winnipeg for children with a wide range of handicaps which in many instances are multiple and severe.

3.2.2 School-Aged:

Commendable efforts have been made to include handicapped children within the standard school system. Speech and language problems which have not been dealt with (sometimes not apprehended) earlier are now addressed. There are some disparities within Winnipeg and more, over a fairly wide range, in rural Manitoba. Although thinly stretched in many rural settings, physiotherapy and occupational therapy are available, sometimes "purchased" from another agency or institution, eg., Community Therapy Services or a hospital. Services in the schools through employment by school boards as in Winnipeg and some districts outside Winnipeg, or more directly under the Child Care and Development Branch of Manitoba Education, cease during July and August. Probably it is appropriate to suspend certain activities in those two months, but surely speech/language and some other therapies would profit from continuation and may be set back by interruption.

If the services offered within the school-based programs were uniform and offered similar advantages and access throughout Manitoba, then they might be viewed as satisfactory, but that is not the case. Also, for children who have not gone to school or who have to leave school, the needs must be met within the health system or in some other way. In a particular community, it is usually very difficult to assure a timely, effective and coordinated rehabilitation program for children who do not meet criteria for a particular program or whose circumstances change through illness or injury.

3.2.3 **Adults: Young and Middle-Aged**:

Certain kinds of problems can occur in any age group, either gender and in any geographic location. However, certain groups can be identified because of the special nature of their requirements, numerical prominence and differing potential for benefit from intervention. What follows is not intended as an exhaustive, but rather an illustrative list and discussion. It is intended to survey briefly a number of important service areas and thus identify many of the important problems. Many groups not narrowly and specifically named probably have much in common with some of those who are cited.

(a) **Post- traumatic disability:**

An individual who suffers a major but probably recoverable injury, eg. a fracture, can usually expect effective physiotherapy in a larger hospital while that person is an in-patient. She may get necessary continuation of such services quite promptly as an out-patient but the probability is less. If the person lives in a community where there are physiotherapists in private practice, that circumstance improves the prospects for clients who are able to pay. Amputees, particularly younger adults, get good service, generally, especially if they are well-motivated and appear likely to return to an effective participation in activities of the work-place or home. Highly specialized prosthetic services, while quantitatively constrained, are qualitatively excellent. Cost considerations for such a specialized service necessitate that rural consumers come to Winnipeg, for the most part, but some outreach is available and could feasibly and usefully be expanded (C23).

Individuals who come within the auspices of the Workers' Compensation Board are a special concern. A number of measures have been employed to improve the efficiency of diagnosis and management of these people, especially those with prolonged recoveries. Obviously, there are sets of very complex issues which were not and probably could not be fully and adequately explored by this limited survey. One

important question is whether or not beneficiaries of the Workers' Compensation program or of the Manitoba Public Insurance Corporation (or other third-party liability insurer) should be dealt with by means separate from other clients, except, possibly, when hospitalized. In ideal circumstances, probably the answer would be "No". For practical reasons, these and some other programs will have to be separately handled to some extent in the near term, except for hospital in-patient services.

(b) Chronic Non-Traumatic Neural, Muscular and/or Skeletal Disorders:

Persons with various kinds of arthritis, progressive neuromuscular disorders (like Huntington Disease, adult forms of muscular dystrophy or motor neuron disease) or bone disorders (like osteoporosis) may have the onset at any time in life. Progression may be absent or slow but occasionally may be relatively rapid. In a few categories or instances, there may be brief or long remissions with recovery and maintenance of a reasonable satisfactory level of function, comfort and social adjustment. For many persons, there is considerable suffering, dysfunction and maladaptation, much of which could be, but often is not, addressed and aided by rehabilitation efforts (D3).

If one considers people with rheumatoid arthritis, there are many difficulties. Some patients state that their family

physicians appear to have either insufficient skill or time to treat rheumatoid arthritis, particularly the more complicated cases. Some medical practitioners in rural Manitoba voiced a wish to have short preceptorships in rheumatology or rehabilitation medicine (physiatry) to redress perceived deficiencies in knowledge and skills in these areas.

The problem is further compounded in that Manitoba has a severe shortage of rheumatologists and a moderate shortage of rehabilitation medicine specialists. In Winnipeg, at the major teaching hospitals and elsewhere, patients with chronic arthritis, even with acute exacerbations, compete with little success for timely and sufficient physiotherapy or occupational therapy. A branch of the Arthritis Society in Brandon pointed out that these problems are more evident in Brandon than in Winnipeg, and more distant rural arthritis patients have trouble getting any help.

(c) <u>Chronic Disability from Central Nervous System Disorders, Including Trauma</u>:

In this large and somewhat disparate group are included victims of trauma with partial destruction of the brain or spinal cord, and brain damage from a stroke, tumor or other causes. The outlook, needs and required interventions depend upon the location and extent of the disorder and upon such effects as cognitive impairment and behavioral changes.

Motor impairment may range from mild weakness and incoordination in one arm and/or leg on the same side to total loss of function in the lower limbs and marked loss in the upper limbs as occurs in quadriplegia. To enhance such functions as remain, to facilitate coping despite lost functions and to re-establish psychosocial well-being and good relationships with family and friends and to facilitate the optimal achievable level of independent living constitute a set of great challenges in the severest instances.

Manitoba is a province in which people with spinal injuries are having their problems addressed effectively. There are some areas which might be improved so as to enable individuals, eg. with paraplegia, to spend time in a hospital area equipped like an apartment or home, with family present. In such a setting, there would not be a real requirement for physicians or nursing staff in regular attendance, but physiotherapists, occupational therapists, aides and attendants would assist according to a pre-arranged schedule with infrequent on-request visits.

Personnel and systems to provide psychosocial support to patients with brain or spinal injuries and their families are spread too thin, at present, in Winnipeg. They are very sparse elsewhere in the province. There is scanty availability of suitable housing for brain- or spinal cord-

injured persons, along with measures to assist them to achieve and maintain independent living, i.e., with minimal reliance upon or control by others. Many of these considerations come down to issues of quality of life, about which it is difficult to calculate cost/benefit ratios.

(d) **Adults with Special Sensory Impairment**:

The problem and the approaches to providing help differ between those who have lifelong impairment or absence of vision or hearing and those who experience such a change some time after early infancy. It is tempting to believe that those who have lifelong impairment are being reasonably well served by measures which are in place. However, in only comparatively recent times have the blind been fairly readily included in regular educational settings along with sighted students. Similarly, changed approaches are under way for the hearing impaired. Their siblings with normal hearing are being included in some pre-school settings where they can learn signing while the hearing-impaired learn signing and lip-reading.

When people suffer later impairment of sight or hearing, particularly the latter, there is often delay in seeking or obtaining help by way of appropriate assessment and, where indicated, prescription of an effective hearing-aid.

Audiological and audiometric services are irregularly distributed and unevenly available, even in some larger Winnipeg hospitals (eg. St. Boniface General which has an equipped room but no audiologist).

The Canadian National Institute for the Blind has developed and is offering a great many forms of assistance for the visually impaired. A recent trend is toward even greater independence for them than was heretofore the case.

(e) Persons with Chronic Pain:

Many persons who have sustained trauma, or the effects of certain tumors or degenerative disorders, may have chronic or even intractable pain which may be disabling to a greater or lesser degree. There may be a psychosocial component. Pain clinics and program have been developed, to a limited extent, in an effort to help these people. They are prominently represented among victims of workplace and vehicular accidents. Their problems are often poorly understood by many physicians, nurses and other professionals as well as by employers, colleagues and relatives. Programs of help are required, which may need contributions by various kinds of physicians, therapists and by psychologists and social workers with relevant

orientation and background. Such efforts are most charitably characterized as formative or incipient in Manitoba. They are an important component in the rehabilitation of many individuals.

3.2.4 Patients of Senior Years:

Many of the problems that were addressed for younger adults not only continue into later years but are likely to be associated with and complicated by other physical and psychosocial obstacles and deficiencies. The numbers of elderly persons are increasing, both absolutely and as a fraction of the whole population. Past perceptions about the capacity of older people to recover, adapt and benefit from interventions have had to be revised upward. There nevertheless lingers in the minds of many members of the public and of many care providers a perception that little can be accomplished and resources would be better applied elsewhere.

If a previously active and healthy person, living independently, sustains a stroke with severe right-sided weakness and loss of coordination, together with impairment or loss of speech, she has very limited prospects of receiving adequate rehabilitation therapy. That chance will improve if there is considerable "spontaneous" improvement

in the first ten or fifteen days and if the patient is alert, perceptive, cooperative, determined, well-behaved and has a supportive and determined family. It will help if her physician and the nursing staff "push" for help for her. It will achieve little if other, apparently more needful patients with estimated better potential for benefit are competing for the care that the stroke patient might otherwise receive.

If such a patient begins physiotherapy, first efforts may be devoted to aiding her to walk with support. That will be very difficult if her hand and arm are so functionally impaired as not to be usable in helping support her. If she learns to walk with some support or without, then hand and arm functions will be addressed, as they may if she fails to walk but there appears to be some prospect for enhancing arm and hand performance. However, many such patients, particularly in smaller rural settings, get little, if any, physiotherapy or occupational therapy.

If some progress is made with hand and arm and/or lower limb function, an occupational therapist will probably be required to assess and treat the patient, so that she can be helped with the activities of bathing, dressing, grooming, eating and possibly preparing food as well as related tasks. Such services are available in some hospitals and day

treatment centres but are very sparsely available in rural settings.

An important need of the patient described, usually even if there is some "spontaneous" improvement, is help with her speech. Given some progress in the other facets of her rehabilitation program, but not likely otherwise, some assistance by a speech and language pathologist (therapist) may be possible. However, such individuals are in short supply in the major teaching hospitals in Winnipeg and scarcer in other acute care and long-term facilities in Winnipeg. It is virtually impossible to obtain such help, except for assessment and occasional consultant-type service, outside Winnipeg and Brandon (B42, B47).

As a result of the various impediments facing our hypothetical stroke patient, she and most individuals like her are very unlikely to receive rehabilitation therapy that may offer considerable benefit. Even more important, the effort may at least encourage the patient during what is surely a devastating experience. It may be claimed that employing and then withdrawing help, because of no or little progress, may also have a strongly negative effect. However, one would not find such arguments compelling if a patient desired necessary treatment for cancer or congestive heart failure, even if the probability of little benefit and/or disappointment upon withdrawal were recognized.

Therapy services for the elderly can be considered in many more contexts but the conclusion, in any context, will be that programs and personnel are not sufficiently available. This applies not only in acute care hospitals but also in hospitals for long-term care, personal care homes and the community.

4. Therapy Personnel:

4.1 Required Disciplines and Numbers:

Human resources, manpower or personnel requirements have been under scrutiny in all health professional disciplines and in many other fields of endeavour or service. In most such instances, the approaches or factors considered include:

(a) Demand for service from the users' viewpoint.

Requirements may be identified by user advocate groups, or by agencies or institutions which are involved as points of service, or by professional groups or associations or by third party insurers.

(b) Unfilled but available budgeted positions.

This can be very misleading because of the likelihood that total needs may not have been perceived or included in the estimates by which necessary numbers are decided, particularly if there is a hard limit upon funding.

(c) Estimates by one professional group or a combination of several such groups.

Sometimes a given group, whether physicians, nurses, technicians or therapists may advance their group's cause with

what may appear to others as too great concern for the interests and role(s) of one or a few groups and too little for those of others. Thus, turf struggles and protection of professional standards can have some negative impacts. For example, some therapists readily perceive the usefulness and justifiable inclusion of therapy aides or technicians who have training which is qualitatively and quantitatively inferior to that of a professional therapist, while others view such arrangements warily (C3). Some of the reasons for concern are very reasonable and appropriate but others appear less so. Similar concerns emerge when it is suggested that a considerable number of physicians' tasks might be performed by nurse practitioners, particularly if it is further suggested that such activities might ensue from direct access by users to nurse practitioners and/or that explicit supervision of the nurse practitioner by a physician might not be necessary. Similar alarms are sounded whenever any group's territory, span of control and/or range of exclusivity are believed to be threatened.

(d) Political and economic considerations.

Available funding is always subject to limits, whoever pays and by whatever system. Therapy services in Manitoba compete not only within the health system and within the ambit of the Department of Health, but also within other Departments and Agencies. Global budgets in health facilities result in competition between components of each facility. It is widely

perceived that the more acute and/or glamorous and highly technical demands, eg. for cardiovascular surgery, are more likely to take precedence over other less dramatic programs, eg. a stroke program or a geriatric day hospital (C38).

This is compounded by partisan rivalries between adjacent communities, competing user groups, urban vs rural, central vs local vs regional. Also, when a particular structure or plan is in place, there is usually reluctance to change. That may be on account of genuine and reasonable doubt about the efficacy of a proposed change. On the other hand, opposition may result from inertia or the protection of territory by a group of people or by a department or agency.

4.1.1 Estimates of requirements

There are a number of previously collected estimates, detailing present numbers of therapists and their deployment. Each major institution in Winnipeg has projected its needs. In the document, "Regionalization of Therapy Services" (D26), there is a fair set of estimates which take cognizance of many of the points enumerated in the foregoing discussion. A case is made for expanding numbers of therapists and for a local or regional deployment of services.

Each discipline will be considered in turn.

(a) Physiotherapy. Figures provided by the Association of Physiotherapists of Manitoba (C3, C4) indicate that, of their members who reside in Manitoba (which accounts for all but three who are elsewhere in Canada), they are located as follows:

Winnipeg	298
Westman	25
Parklands	3
Norman	3
Thompson	2
Central	8
Eastman	3
Interlake	3
Not stated	8
Out of province	3
Total	359

It can be derived that about 83% of physiotherapists are based in Winnipeg and environs where about 60% of the people live, while 16% are based in the rest of the province where 40% of the people are. Of the latter group, 8% are in Westman and 8% in other regions. Certainly, many services are provided to rural users who come to Winnipeg of necessity because of the availability there of other resources, eg. for children with multiple

handicaps. Also, some therapists based in Winnipeg provide travelling clinic resources to rural users, but often with a large component of total professional time spent in travel.

A convincing case has been made that there needs to be an increase of about 15% in Winnipeg-based physiotherapy positions. These are needed to maintain programs that provide not only ordinary physiotherapy services but also provide for those highly specialized programs, eg. spinal injury, which are only practical in major urban settings. Furthermore, as well as meeting service needs, some time and effort have to be devoted to the teaching and training of undergraduate students and new graduates. A considerable portion of such teaching, for logistical reasons, must be done in Winnipeg hospitals. However, some can and should take place in rural areas.

Conservatively, in order to meet the currently known and anticipated demands in rural areas, there may be a requirement for between a two-fold and three-fold increase. This would fill gaps or shorten waiting lists and diminish the proportion of time spent in travelling, either by therapists going to users, or by users going to the point of service. These extensions are comparable to figures proposed in the submission entitled,

"Regionalization of Therapy Services - Implementation Plan", as applicable to rural Manitoba (D26).

(b) Occupational Therapy

The Association of Occupational Therapists of Manitoba (D4) provided figures from which are derived the following:

Total number practising in Manitoba	221
Total number licensed in Manitoba	236
Employed full-time	147
Employed part-time	68
Practising outside Winnipeg/Brandon	12

The Association's data do not accurately differentiate with respect to location of work site vs location of employer. Thus, there are probably several occupational therapists all or most of whose effort is applied outside Winnipeg and Brandon, but who are ostensibly employed by a Winnipeg-based agency. Nevertheless, the proportion employed in rural areas is probably around 10% or 15% at most, including Brandon and Westman. Thus, the disparity found for physiotherapy also pertains to occupational therapy. Virtually all categories of need are inadequately addressed. Some, such as patients with strokes and those with chronic mental illness,

particularly in rural areas, (but also in urban areas), are not receiving required services.

Following an approach similar to that for physiotherapy, but recognizing a somewhat greater need because of some seriously undermanned programs (eg. mental health, strokes, arthritis, nervous system injuries), there should be an increase of 25% in occupational therapy positions in Winnipeg or about 30 EFT positions. An increase of 150% or 25 EFT positions is required for Brandon and rural Manitoba.

(c) Audiometry/audiology and speech language pathology

Audiometrists and audiologists, strictly speaking, are diagnosticians for the most part. They require mention here because their activities are essential, and hence adequate numbers must be maintained, in order to discover and describe hearing impairment and to initiate in many cases the train of events which may help the hearing-impaired to obtain hearing devices and, where applicable, help with speech.

Speech/language pathologists (often referred to as speech therapists) receive referrals of individuals (usually children) who are hearing-impaired and some known to be likely to have speech problems, such as children with

cleft palate or other congenital defects affecting speech. They also receive referrals of adults with acquired speech impairment as a result of strokes, brain surgery, brain trauma and laryngectomy. Brain dysfunction (from stroke or other causes) may cause impairment of swallowing. If not ameliorated, it will be difficult to assure adequate nutrition. Attempts to feed by means of a naso-gastric tube require institutional care and carry a risk of aspirating food into the lungs. That may lead to death through choking (airway obstruction) or because of pneumonia. In the past decade, speech/language pathologists have often been able to help restore lost or impaired swallowing function.

Credible claims from many sources point to an inadequacy of speech therapy for pre-school children as has been previously mentioned. Probably the number of speech/language pathologists needs to be increased by 60% in order to meet needs which are currently not being met at all, or in a less that adequate fashion, particularly for older patients. If the number of speech/language pathologists is taken as 151 (as provided by the Manitoba Speech and Hearing Association), the required addition would be 90 individuals. Because many children with multiple handicaps and special needs require a number of specialized services which are and will continue to be difficult to supply outside Winnipeg, probably 45 to 50

speech/language pathologists are needed for all purposes in Winnipeg and the remainder in the rest of Manitoba. These conclusions are similar to those in the 21 November 1988 submission entitled "Communication Disorders", from Manitoba Health/MHSC by Dr. S. Macdonald and Mr. R. W. Siemens.

There are reportedly 23 audiologists in Manitoba. The needed increase is estimated to be between 9 and 12 EFT, approximately equally distributed between Winnipeg and the remainder of Manitoba.

(e) Other personnel

(1) Physiatrists (Rehabilitation Medicine Physicians). There are currently eight, all based in Winnipeg. Some of them provide occasional and limited services to centres outside Winnipeg, almost entirely in the southern quarter of the province. To assure sufficient physician participation in the multidisciplinary approach which is the most desirable, the number should be 15 or 16.

(2) Rheumatologists. Numbers have never been adequate but have been steadily depleted over the past five years through departures and retirements. At least one currently practising rheumatologist is close to retirement, as well. The current five rheumatologists

(four for adults, one for children) require to be complemented by at least five and, preferably, seven more. That would go far to assure adequate service and continuation of a specialist training program.

(3) Orthotists, prosthetists and biomedical engineers have an important role in the provision of various devices to assist and transport handicapped people. Artificial limbs and electric wheel chairs are examples. However, far more sophisticated devices have been provided in recent years, by which massively motor-impaired persons can communicate and carry out a wide range of activities by such means as blowing into, or sucking upon, a tube.

A very effective group of highly skilled individuals has been based at the Health Sciences Centre. Their resources have been strained such that people often have many months of waiting and there is a diminishing availability of personnel to travel to points outside Winnipeg to assess and assist clients there. Very simply, there are increased number of clients to be served, and there are ways of helping them which proceed from a wider range of more complicated and costly devices. Not unexpectedly, this leads to the need for an increase of 20% in required personnel to keep up with the current and growing demand.

Since all the fully trained professional personnel in the group are trained elsewhere, the need to assist Manitobans to acquire such education and the various strategies to attract and retain them are similar to those cited for the therapists.

(4) Rehabilitation technicians and aides are employed in various situations to complement the activities of fully qualified therapists. The least formally trained helpers are parents and family members who follow instructions of a skilled therapist, eg. in a rural or remote setting where the professional therapists can only occasionally visit. Another example is the nurse's assistant or aide who works in a hospital or other institution under the regular or occasional supervision and direction of the professional worker.

In provinces like Quebec and in some European countries, courses of two or three years' duration are provided to train therapy aides. This is in contrast to the four or more years required for full professional training. Professional therapists have some concerns but generally favour the judicious employment of aides if adequate supervision is assured. Quite understandably, the fully professionally qualified therapist opposes the independent unsupervised non-professional who attempts to

perform all of the professional therapist's functions and may be hired to fill a position which is intended for a fully qualified person.

Therapy technicians and aides may represent a means to bridging part of the deficiency in manpower. If, initially, informally trained people are employed, as they are now to some extent, then eventually organized training programs need to be evolved. The School of Medical Rehabilitation, one or another additional site of post-secondary vocational training and the major therapy groups should be represented in a planning group for such an effort.

(5) Psychologists. Many informants cited lack of sufficient service by psychologists for children in the school system, people with nervous system diseases or trauma, and injured workers, as well as many other groups. More ease of access or referral and provision of insured payment on a fee-for-service basis may be worth considering, along with other approaches to increase access to this group of professionals (B45, D36).

(6) Psychiatrists. The shortage of psychiatrists has its most obvious impact on individuals whose primary problem is mental illness. However, many victims of stroke or of brain surgery or injury and many people with

maladjustments to acute or chronic disability could benefit from better access to psychiatric care. However, the pursuit of that topic is occurring elsewhere. This brief mention is intended to underscore the importance of the contribution of a psychiatrist in rehabilitation.

(7) Social workers. Many individuals referred for rehabilitation have psychosocial, economic and situational problems and stresses for which they require counselling, aid and intervention. Social workers in hospitals, most often, can handle only the barest essentials such as assessment and coordinating measures for coping at home or, when that cannot be done, arranging for placement in a personal care home. It is desirable, but frequently not possible, for a social worker to establish continuity in assisting a client, or to devote the necessary time and effort. Devoting more social workers to rehabilitation teams would be beneficial and, in some instances, critically important.

(8) Other disciplines.

A rehabilitation service requires supervisors and secretarial support.

The place for athletic therapists in the care of injuries and dysfunction, as well as in prevention of injuries

sustained during recreation, would appear to be emerging. They deserve careful consideration but that probably has to be held in abeyance until other kinds of therapists and needs are addressed. Meanwhile, they should be encouraged to continue to develop and maintain professional standards of education and service.

4.2 Sources

The great majority of physiotherapists and occupational therapists in Manitoba are Manitoba-born and Manitoba-educated. A high entrance requirement and relatively few places in each discipline at the University of Manitoba, and other circumstances which tend to favour applicants from this province are important determinants. Many graduates remain in Manitoba (considerably more than fifty per cent). A small number of current practitioners were born in other provinces or outside Canada, and many in those groups were educated elsewhere.

A few therapists, who had left practice for various reasons, seek to return to work on either a full-time or part-time basis each year. Until they meet certain requirements to demonstrate competence, there is little financial support or incentive.

The current supply is not adequate to meet needs. As is the case for many professional groups, it is difficult to attract practitioners to Manitoba and some other parts of Canada because of considerations of climate, life-style, amenities and/or remuneration, any or all of which may seem to a prospective applicant to be less favourable when compared with those of other areas.

The situation is more difficult for audiologists and speech/language pathologists. Rather fortunately, many Manitoba young people who choose these career pathways return here after completing their education in another area, which in many instances is North Dakota or Minnesota. A few practitioners have come initially from the U.S.A. It is fortunate that, until now, it has been possible to fill and maintain many of the available positions, but there a few places in Winnipeg and several outside the city which are not filled. If the recommended increases in numbers of posts are established, the supply will likely be considerably short of the demand.

Probable shortfalls, representing the projected excess of demand over current supply, annualized are:

(a) Physiotherapy: 10 to 12

(b) Occupational therapy: 8 to 10

(c) Speech/language therapy: 15 to 18

(d) Audiology: 6 to 8

Categories (c) and (d) may temporarily require to add even larger numbers of practitioners. That will be determined by the rate at which new positions are funded and made available.

4.3 Supply, Education, Recruitment and Retention

The University of Manitoba has long-established programs of physiotherapy and occupational therapy. The programs have been operated in conjunction with the Faculty of Medicine. About fifteen years ago, the annual intake in each discipline was almost halved, to 22 students. Clinical/practical training is provided at many sites, among which are the Health Sciences Centre, including Winnipeg Children's Hospital, other Winnipeg hospitals and a few rural hospitals. The volume or extent of clinical training is greatest among the first and least among the last on that list.

The educational programs have had very inadequate accommodation at the University and can fairly be considered to have been disadvantaged in some contexts by being a relatively small component of a much larger enterprise, namely the Faculty of Medicine. At times, there has been uncertainty about whether the Faculty of Medicine or the Health Sciences Centre ought to provide housing for administrative and classroom facilities. This situation probably is going to be

improved, perhaps even resolved, as a result of the appointment of a new Director of the conjoint programs.

It would appear reasonable to expand the intake of students in each of the disciplines of physiotherapy and occupational therapy from 22 to 30 or 32 students. It may be prudent to carry this out in two steps but to increase both. A somewhat greater increase in physiotherapy may be warranted, for example, in a 12:10 or 12:8 ratio. For the academic year 1990-91, some funding has been provided for increases, of as yet to be determined magnitude.

It is unlikely that current means of supply of speech/language pathologists and audiologists can be relied upon to assure maintenance, let alone necessary expansion, of the pool of personnel. Manitoba must seriously contemplate the relatively early development of schools for the education and training of those individuals. The training of Manitoba students in Manitoba will enhance the probability that any given graduate will practise in this province. Also, the existence of a professional school in any discipline favours continuing education and the maintenance of competence, which benefit consumers but also improve the morale and outlook of the relevant professional group. It is possible and it may be necessary to establish links with other provinces which have no training programs in these disciplines and therefore have a need and an interest. Most probably, such programs ought to

be based at the University of Manitoba, and possibly, initially in collaboration with the existing therapies programs, but these considerations can be dealt with once a decision is made to consider establishment of such educational programs.

In order to recruit people to Manitoba and retain them, conditions of work and living must be attractive. One component is salary which must be competitive. Special monetary and other inducements may be required, particularly for service in rural and remote areas. Many strategies have been proposed for therapists, physicians and others. These are currently under review by the Standing Committee on Medical Manpower, whose recommendations may prove to be adaptable to the therapy disciplines.

It is becoming apparent that, in order to assure health services personnel for rural Manitoba, it is desirable to assure that a reasonable proportion of entering students originate from rural areas. It would be simplistic to accept that most or even many people of rural origin will necessarily return and remain there, but city-born and -raised students are much less likely than their rural counterparts to opt for rural life. The means for assuring an increase in numbers of rural students must not be unduly prescriptive and certainly not unfairly prejudicial toward qualified city residents. Rather, rural students should be presented with career

counselling, promotional presentations and scholarship opportunities. A useful device is a stipend for students during a practicum or internship, or even during summer assignments. Otherwise, programs which lack such stipends will be less able to attract students and are less likely to recruit recent graduates than those which do. Also, loans may be advanced which are cancellable by proration through a specified period of "pay-back" service in a rural assignment. The emphasis should be selective inclusion or inducements rather than exclusions or barriers. Any kind of affirmative action must avoid penalizing the majority.

Rural practitioners have less opportunity for collegial contact and for formal or informal continuing or in-service education. This disadvantage could be addressed by providing time off and generous assistance with funding of continuing professional education to a greater extent than for comparable (and also necessary) similar benefits for city-based personnel.

4.4 Private Practice

Private practice is a topic which arises in discussions about therapists and some other involved occupational groups, such as psychologists. There is concern that users outside a hospital cannot directly access services, that is, not without referral made most often by a physician. There is

essentially no provision for payment by Manitoba Health Services commission on a fee-for-service basis for out-of-hospital therapy. Physiotherapists, psychologists and other professionals, as well as some clients and their advocates will argue that access should be the same as it is for chiropractors and psychiatrists, for example, and that fee-for-service for professional workers outside public health facilities is similarly justifiable. There are large implications associated with proposals for increased access (and hence, utilization) and with the expansion of MHSC benefits to include fee-for-service activities by more groups of providers than currently. That does not necessarily preclude the extensions of access and/or providing fee-for-service payments subject to certain guidelines. However, on principle, once the process has begun, it will be difficult to justify and maintain differences between groups, eg., physiotherapists and chiropractors.

Presently, in Manitoba, there are about 75 physiotherapists in private practice. About two-thirds are full-time and the rest part-time. Five are in Brandon and the remainder do virtually all of their work in Winnipeg, with few exceptions. Some psychologists provide fee-for-service activities. There are practically no fee-for-service occupational therapists or speech/language pathologists.

5 Summary of Findings and Observations

5.1 Components of the Present System:

The Province of Manitoba has some outstanding resources, capabilities and services in the field of Rehabilitation. These include but are not limited to:

5.1.1 The School of Medical Rehabilitation has an effective program for educating physiotherapists and occupational therapists. The school enjoys a deserved excellent reputation. It is in need of expansion if resources can be made available.

5.1.2 The Rehabilitation Hospital of the Health Sciences Centre together with specialized and educational components at the Children's Hospital and Rehabilitation Centre for Children, as well as at St. Boniface General Hospital constitute critical resources. A major portion of the education and training of physiotherapists and occupational therapists occurs in these programs. Also, the training program for physicians in Rehabilitation Medicine is based at the Health Sciences Centre. This program has prospered under Dr. H. Dubo's direction, as have important innovations and developments in the care of patients with various afflictions. Possibly best known is the work related to persons with spinal injuries.

5.1.3 Hospital-based programs in Winnipeg and some other centres are qualitatively very good but usually hampered by quantitative inadequacy, to a greater or lesser extent, of resources to meet demands.

5.1.4 Other programs are found under Manitoba Health, Manitoba Education and the school divisions, Community Therapy Services, a few other programs linked with Government and with certain constituencies defined by category of need, eg. mental health, Manitobans with disabilities, hearing (speech) impaired, visually impaired, persons injured in the workplace, etc.

5.1.5 Organizational Mosaic/Multiple Agencies through which services are provided. Several government departments are involved, often through several programs within one department. To this are added certain groups whose identity is partially or completely separate from Government, although ultimately almost all payment for services is derived from MHSC, MPIC, WCB or other government sources.

To some extent, the diversity and separation of operational groups may serve useful purposes. However, particularly in rural areas, the outcome may be fragmentation and lack of coordination because

of too many agents, often distantly based, acting independently of one another and insufficiently aware of and responsive to local needs.

5.2 Drawbacks and Deficiencies:

5.2.1 Manpower

The needed increment, over all, is not less than 50%. In rural areas, to provide optimal service, the increment required is probably 150%, ie. 2.5 times current levels. There are variations from one region or centre to another, and from one discipline to another.

5.2.2 Recruitment and Retention

As described in Section 4 of this report, there is insufficient attention to the attraction of candidates from rural Manitoba. There has been a serious failure to attract and retain therapists to reside and work outside Winnipeg.

5.2.3 Inadequacy of Organization and Administration

The multiplicity of channels and programs by which service is provided, coupled with a lack of local control and consumer participation, constitute obstacles to progress rather than means of solution, especially in rural Manitoba. However, it also has negative effects in Winnipeg by being partly responsible for inequities in the availability of

services when, for example, comparing pre-school with school-aged children; mental and physical disability; and middle-aged and older clients.

5.2.4 Professional Education

The provision for educating physiotherapists and occupational therapists provides for too few entering students. The number in each category should be 28 or 32 instead of 22 as it is presently. The lack of a program in Manitoba for the education of speech/language pathologists and audiologists is currently a problem and it can safely be predicted to increase. Also, inducements for students from Manitoba to be educated elsewhere in these fields and to return to this province are lacking and, in fact, less than in the past. Measures to encourage former practitioners to return to practice are lacking. Means to encourage and support established practitioners to engage in continuing professional education are insufficient.

5.2.5 Inequities

There have been recurrent and repetitive references throughout this report to various needs, variously identified and categorized, that are not being adequately and fairly addressed. Paradoxically, some of the fragmentation observed in the organization and provision of care has arisen from well-intended attempts to meet a particular set of needs. Too often, that has had the effect

of putting barriers before other groups. Jurisdictional, geographic and socio-economic obstacles have particularly impeded native people's access to rehabilitation services. These problems require concerted study by the Governments of Canada and Manitoba, and by representatives of native people.

6. Recommendations

6.1 Education and Training:

6.1.1. The University of Manitoba should be encouraged to establish the educational programs in physiotherapy and occupational therapy as a Faculty of Rehabilitation Therapy.

6.1.2 Entering classes of both physiotherapy and occupational therapy should be increased from 22 to 30, in each group.

6.1.3 Financial support by MHSC for all students should be enhanced, particularly for rural students and those who undertake to assume practice in rural locations.

6.1.4 Early and careful consideration should be given to establishing, in Manitoba, educational programs for speech/language pathology and audiology. It is recommended that a purchase agreement be entered with speech/language pathology educational programs, in North Dakota or elsewhere, to provide approximately five student entries per year, as a short-term measure to alleviate the shortage. Such students should receive suitable stipends to provide for costs of living and expenses of educational materials.

6.1.5 Purchase agreements as described in 6.1.4 should be considered for other rehabilitation disciplines in short supply and for which training is not available in Manitoba.

6.1.6 Encouragement and financial assistance, differentially greater for rural-based therapists, should be provided to assure continuing professional education.

6.1.7 Whenever and wherever student therapists, both undergraduate or graduate, are carrying out clinical duties, stipends should be paid to them. They should be derived from the budget of Manitoba Health.

6.2 Positions and Manpower:

Quantitative data and projections have been presented in other reports to the Government of Manitoba. There are differences in detail but certain broad summative statements are possible. Numbers in the therapy disciplines and collaborating occupations need to be increased as follows:

6.2.1 In rural Manitoba: 50 to 150%

6.2.2 In Winnipeg: 15 to 25%

6.2.3 Allocation must take into account not only the needs of rural people but also the elderly, patients with strokes and

injuries to the brain or spinal cord, preschool children (particularly the hearing impaired and those with speech defects) and Natives and other minority groups.

6.2.4 There is a need to expand the training programs for rheumatologists and physiatrists. Specifically, additional residency positions must be made available, and the various measures which have been recommended to attract and retain other professional workers should be carefully considered for these programs as well.

6.3 Organization and Administration:

Simplification and consolidation are the only feasible and affordable measures, particularly for rural Manitoba. Local control is equally practical and desirable. All presently diversified activities should be collected under one locally based administrative body. All therapists should be hired and based (ie. resident) locally, except for highly specialized programs and extremely remote areas.

Probably many other health-related services could usefully be similarly decentralized. Whether this is called decentralization, local authority, or regionalization makes no real difference, provided that it is established so as to achieve the highest attainable satisfaction of providers and the simplest and most effective means of planning, control and deployment of services.

It is not suggested that all current structures and organizations be summarily abandoned, although some eventually would be phased out. In the City of Winnipeg, for many good, and other less good but historic, reasons much of the current structure should be retained in the short to intermediate term.

A combined effort by representatives of the Government of Canada, the Government of Manitoba and native people will be required to provide better rehabilitation services to native people.

If a decision to establish local planning, development and control is favoured, the area/regional development will require participation by central government agencies. if such a decision is not taken, there seems to be no alternative to a continuation of the current activities of many agencies and groups functioning in a poorly coordinated fashion.

6.4 Implementation:

It is recommended that a committee of officials be formed to explore the feasibility of the recommended measures, to consider which of them ought to be implemented and with what priority, and to provide advice and a plan to carry the plan forward.

APPENDIX A

LETTER OF ENGAGEMENT

THE UNIVERSITY OF MANITOBA

FACULTY OF MEDICINE
Department of Medicine

Health Sciences Centre
700 William Avenue
Winnipeg, Manitoba
Canada R3E 0Z3

787-4386

December 1, 1988

Mr. Frank Maynard
Acting Deputy Minister of Health
Government of Manitoba
310 Legislative Building
440 Broadway Avenue
Winnipeg, Manitoba
R3C 0V8

Dear Mr. Maynard:

Thank you for the discussion about my possible involvement in a review of rehabilitation services in Manitoba. We established that assessments should include, but not be restricted to:

1. Both urban and rural needs and services.
2. Programs for children and adults.
3. Measures designed not only for restoration of function and employability but also those likely to produce modest enhancement.
4. Acute and long-term care settings.
5. Various modalities including speech assessment and therapy.
6. Education and supply of professional workers.

Eventual recommendations may include, but not be limited to:

1. Qualitative aspects and varieties of services.
2. Quantitative aspects.
3. Organization.
4. Allocation, distribution and access.
5. Cost considerations.
6. Strategies to achieve change in desired directions.

The review will rely upon correspondence with interested and involved individuals, groups, organizations and facilities from whom information and opinions will be sought. It will also necessitate face-to-face meetings with many respondents as well as with several sources who may not have made written responses but whose views are considered to be of vital importance in one or more of the contexts listed above.

It was agreed that I will require the aid of a resource person and of full secretarial services for the endeavour.

I request remuneration for all time spent in carrying out any phase of the inquiry and in generating reports, arranging interviews and the like. I attach a schedule (A) of expected remuneration to be reckoned in hours of sessions of less than a half-day, or otherwise by the half-day or whole day. Should the amounts stipulated by unsatisfactory, I will be pleased to discuss with you any such points.

I look forward to meeting with you and, if possible, Ms. Barbara Miller, at 10:30 a.m. on 13 December in your office.

As we also noted, probably little more than preliminary planning can take place in December. Since I shall not be available from early March until mid-April, it is not likely that the task and the report can be completed before the end of May.

Sincerely yours,

W.D. MacDiarmid, MD

WDMacD:mp

APPENDIX B

MEETINGS HELD

List of Interviews

	Date	Contacts
B1.	January 5, 1989	Dr. Sharon Macdonald Assistant Deputy Minister Community Health Programs Manitoba Health Mr. J. Selinger, Director Hearing Conservation Program Manitoba Health
B2.	January 12, 1989	Mr. J. Selinger (same as above)
B3.	January 13, 1989	Mr. F. DeCock, Executive Director Manitoba Health Services Commission
B4.	January 18, 1989	Mr. D. Pascoe, Director Research & Planning Directorate Manitoba Health
B5.	January 19, 1989	Mr. N. J. Cenerini, Director Child Care & Development Branch Manitoba Education
B6.	January 20, 1989	Ms. O. Zabloski, Director Office of Continuing Care Manitoba Health Mr. E. Goerz Program Specialist (Social Work) Office of Continuing Care Manitoba Health
B7.	January 23, 1989	Dr. H. Dubo Rehabilitation Medicine Health Sciences Centre
B8.	January 26, 1989	Ms. B. Havens, Provincial Gerontologist Manitoba Health

B9.	January 30, 1989	Mr. John Robson, Director Rural Facilities Manitoba Health Services Commission Ms. C. Gousseau Rural Facilities Manitoba Health Services Commission Ms. C. Sarchuk, Consultant Long-Term Care Programs Manitoba Health Services Commission
B10.	January 31, 1989	Ms. Cechetto (plus Assistant Directors) Director of Physiotherapy (Adult) Health Sciences Centre
B11.	January 31, 1989	Mr. R. Siemens, Director Urban Facilities Manitoba Health Services Commission Ms. L. Swerhone, Consultant Urban Facilities Manitoba Health Services Commission
B12.	February 2, 1989	Ms. A. Booth, Head Occupational Therapy Program School of Medical Rehabilitation Faculty of Medicine University of Manitoba
B13.	February 6, 1989	Dr. N. R. Anthonisen, Dean Faculty of Medicine University of Manitoba
B14.	February 6, 1989	Dr. E. Eddy, Head Physiotherapy Program School of Medical Rehabilitation Faculty of Medicine University of Manitoba
B15.	February 9, 1989	Mr. B. Law, Director Childrens' Special Services Manitoba Community Services and Corrections
B16.	February 21, 1989	Ms. M. Stern Occupational Therapy Adult Services Health Sciences Centre plus Assistant Directors - Sharon Eadie and Margaret Faber

B17.	February 21, 1989	Mr. B. Blankenburg, President Canadian Physiotherapy Association (CPA) Manitoba Branch Ms. D. Pearce, Past President CPA, Manitoba Branch Ms. H. Howdle CPA, Manitoba Branch
B18.	February 23, 1989	Ms. G. Gallant et al Registrar/Executive Director Association of Physiotherapists of Manitoba
B19.	February 27, 1989	Mrs. Adair Morrison, President Manitoba Speech and Hearing Association
B20.	March 2, 1989	Ms. L. Ringaert, President Manitoba Society of Occupational Therapists Ms. S. Eadie, Registrar Association of Occupational Therapists of Manitoba
B21.	April 25, 1989	Dr. P. Alexander, Director Communication Disorders Health Sciences Centre
B22.	April 26, 1989	K. Love, Program Specialist Adult Mental Health Services Mental Health Service Manitoba Health
B23.	April 27, 1989	Thompson General Hospital Staff Representatives Manitoba Health and Community Services Thompson Regional Staff Representative
B24.	April 27, 1989	C. Hiscock and P. Martin Society for Manitobans with Disabilities (Thompson office)
B25.	April 27, 1989	Thompson General Hospital Medical Staff
B26.	April 28, 1989	Flin Flon General Hospital Staff Manitoba Health and Community Services Norman Regional Staff Representatives (Flin Flon)
B27.	April 28, 1989	The Pas Health Complex Staff Representatives Manitoba Health and Community Services Norman Regional Staff Representatives (The Pas)

B28.	May 4, 1989	Mr. J. McLaren, Director Pediatric Rehabilitative Services Health Sciences Centre
B29.	May 8, 1989	I. Ling, Director Department of Occupational Therapy St. Boniface General Hospital
B30.	May 8, 1989	B. J. Ward, Director Speech and Hearing St. Boniface General Hospital
B31.	May 9, 1989	J. Swinamer, Director Physiotherapy, St. Boniface General Hospital
B32.	May 10, 1989	Dr. G. Bowie L. Leckie S. Snow I. Corobow Community Therapy Services
B33.	May 11, 1989	B. McKechnie B. G. M. Health Care Consultants
B34.	May 11, 1989	G. Bergeron, Executive Committee Manitoba Athletic Therapists Association
B35.	May 12, 1989	L. Fleischer, Director Child Guidance Clinic of Winnipeg
B36.	May 16, 1989	D. Steen, Executive Director M. Stambrook Society for Manitobans with Disabilities
B37.	May 17, 1989	D. Martin D. Beamish Manitoba League for the Physically Handicapped
B38.	May 18, 1989	Mr. H. Pullen, Director Rehabilitation Engineering Department Health Sciences Centre
B39.	May 18, 1989	Mr. J. Lane, Executive Director Staff Representatives Canadian Paraplegic Association, Manitoba Division
B40.	May 18, 1989	Ms Muir Ms McClelland Speech Therapists St. Boniface School Division

B41.	May 19, 1989	Mr. T. Mobberley Mrs. P. Campbell Mr. K. Campbell Central Speech and Hearing Clinic
B42.	May 23, 1989	Mr. R. Brown Mrs. E. Morse Dr. Murray Mr. M. Spears Deer Lodge Centre
B43.	May 23, 1989	C. Sarchuk, Past Chairperson S. Eadie, Registrar R. Jewers, Chairperson C. Miller, former Board member Association of Occupational Therapists of Manitoba
B44.	May 24, 1989	M. Wirt, Program Director School Therapy Services Rehabilitation Centre for Children
B45.	May 29, 1989	Ten Ten Sinclair
B46.	May 30, 1989	G. Hawryluk J. Newton M. Stambrook Psychological Association of Manitoba
B47.	May 30, 1989	Staff, Morden General Hospital Manitoba Health/Family Services Representative
B48.	May 30, 1989	Staff, Eden Mental Health Centre
B49.	May 31, 1989	Mrs. M. Morse Speech Therapist
B50.	May 31, 1989	M. Stambrook Society for Manitobans with Disabilities School
B51.	June 14, 1989	E. Masiowski, Director Rehabilitative Services Canadian National Institute for the Blind
B52.	June 15, 1989	B. Martin O. O'Neill L. MacDonald and Others Canadian Mental Health Association Representatives

B53.	June 16, 1989	Staff Manitoba Health/Family Services Westman Region
B54.	June 16, 1989	Staff Brandon General Hospital
B55.	June 16, 1989	Brandon Arthritis Support Group
B56.	June 16, 1989	W. Brownlie Clinical Physiotherapy Services Brandon, Manitoba

APPENDIX C

CORRESPONDENCE RECEIVED

Correspondence Received

C1. Altona Community Memorial Health Centre: Elias, P., Administrator. Correspondence, March 20, 1989.

C2. Assiniboine Centre: Joubert, D., Clinical Director. April 13, 1989.

C3. Association of Physiotherapists of Manitoba: Gallant, G., Registrar/Executive Director. Correspondence to Minister of Health, Honourable D. Orchard, December 21, 1988.

C4. Association of Physiotherapists of Manitoba: Gallant: G., Registrar/Executive Director. March 13, 1989.

C5. Beausejour District Hospital No. 29: Graham, M. R., Administrator. Correspondence, March 16, 1989.

C6. Brandon Arthritis Support Group: Pirie, L., President. Correspondence, April 25, 1989.

C7. Brandon General Hospital: Bell, H. M., Director of Therapy Services. Correspondence, February 24, 1989.

C8. Brandon General Hospital: Bell, H. M., Director of Therapy Services. Correspondence, June 20, 1989.

C9. Canadian Paraplegic Association: Shryvers, A., Rehabilitation Counsellor. Correspondence, March 28, 1989.

C10. Canadian Physiotherapy Association, Manitoba Branch: Howdle, H. Correspondence, March 16, 1989.

C11. Clinical Physiotherapy Services: Brownlie, W. Correspondence, April 25, 1989.

C12. Community Therapy Services. Correspondence, April 11, 1989.

C13. Deer Lodge Centre: Morse, E., Director Speech and Language Pathology. Correspondence, May, 1989.

C14. Faculty of Medicine University of Manitoba: Anthonisen, N. R., Dean. Correspondence, March 1, 1989.

C15. Faculty of Medicine University of Manitoba: Booth, A., Associate Professor and Head, Division of Occupational Therapy, School of Medical Rehabilitation. Correspondence, March 28, 1989.

C16. Faculty of Medicine University of Manitoba: Dubo, H., Professor and Head, Rehabilitation Medicine. Correspondence, March 31, 1989.

C17. Faculty of Medicine University of Manitoba: Eddy, E. L., Associate Professor and Head, Physical Therapy Division, School of Medical Rehabilitation. Correspondence, February 7, 1989.

C18. Flin Flon General Hospital: Avison, E., Executive Director. Correspondence, April 3, 1989.

C19. Health Sciences Centre: Alexander, P. T., Director, Department of Communication Disorders. Correspondence, March 16, 1989.

C20. Health Sciences Centre: Dubo, H., Rehabilitation Medicine. Correspondence to Dr. A. Ronald, Professor and Head, Department of Medicine, University of Manitoba, April 18, 1989.

C21. Health Sciences Centre: McLaren, J., Director, Pediatric Rehabilitation Services. Correspondence, March 30, 1989.

C22. Health Sciences Centre: Miles-Tapping, C., Physiotherapy Scientist, Physiotherapy Adult Services. Correspondence, March 30, 1989.

C23. Health Sciences Centre: Stern, M., Director, Faber, M. Assistant Director, and S. Eadie, Assistant Director, Occupational Therapy Department, Adult Services. Correspondence, March 31, 1989.

C24. Manitoba Co-ordinating Council for the Hearing Impaired: Gillespie, I., President. Correspondence, March 28, 1989.

C25. Manitoba Developmental Centre: Gamvrelis, P., Director of Speech and Communications. Correspondence May 12, 1989.

C26. Manitoba Health Organizations Incorporated: Desjardins, L. L., Executive Director. Correspondence, June 28, 1989.

C27. Manitoba Medical Association: Arneja, A., Chairman, Section of Physical Medicine and Rehabilitation. Correspondence, April 4, 1989.

C28. Manitoba Medical Association: Cronin, C., Executive Assistant. Correspondence, April 20, 1989.

C29. Manitoba Speech and Hearing Association: Morrison, Adair, President. Correspondence, April 7, 1989.

C30. Morden General Hospital: Hamm, O., Executive Director. Correspondence, April 18, 1989.

C31. Morse, M. Correspondence, June 6, 1989.

C32. Portage District General Hospital: Linnett, R. G., Associate Executive Director. Correspondence, March 21, 1989.

C33. Psychological Association of Manitoba: Newton, J., President. Correspondence, April 4, 1989.

C34. School Therapy Services: Wirt, M., Program Director. Correspondence, May 1, 1989.

C35. St. Amant Centre: Baird, A., Director, Speech Pathology Department. Correspondence, May 30, 1989.

C36. St. Boniface General Hospital: Anderson, B. A., Section of Neurology. Correspondence, June 2, 1989.

C37. St. Boniface General Hospital: Klaverkamp, J. C., Occupational Therapist, Adult Inpatient Services. Correspondence, June 2, 1989.

C38. St. Boniface General Hospital: Ling, I., Director, Department of Occupational Therapy. Correspondence, April 21, 1989.

C39. St. Boniface General Hospital: Swinamer, J., Director, Physiotherapy. Correspondence, May 23, 1989.

C40. St. Boniface General Hospital: Ward, B. J., Director, Department of Communication Disorders. Correspondence, April 11, 1989.

C41. Swan River Valley Hospital: Thompson, D. D., Executive Director. Correspondence, April 3, 1989.

C42. Victoria General Hospital: Slogett, S., Manager, Physical Medicine. Correspondence, July 10, 1989.

C43. Winnipeg League for the Hard of Hearing: Cox, I., Past Executive. Correspondence, April 24, 1989.

C44. Winnipeg League for the Hard of Hearing: Tarte, J. A., President. Correspondence, April 28, 1989.

C45. Workers' Compensation Board of Manitoba: Wylie, K. O., Director of Healthcare Advisory Services. Correspondence, March 29, 1989.

APPENDIX D

REFERENCES

References

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D2. Alexander, P. T. Assessment of the Provision of Speech-Language Pathology and Audiology Services in Manitoba. A report to the Province of Manitoba Social Resources Committee, July 18, 1986

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D4. Association of Occupational Therapists of Manitoba. Registration Statistics. February 1, 1989.

D5. Brandon General Hospital. Brief for Dr. MacDiarmid, Chairman of the Review Committee for Rehabilitative Services in Manitoba. June, 1989.

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D7. Calder, D. and S. H. Jarvis. (1986) Physiotherapy Caseload Guidelines. Physiotherapy Canada, 38(1), 43-47.

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D9. Canadian Association of Occupational Therapists. Position Statement on Undergraduate Education. October, 1987.

D10. Canadian Association of Occupational Therapists. Position Statement on Graduate Education. June, 1986.

D11. Canadian Association of Speech Language Pathologists and Audiologists. The Supply and Requirements for Audiologists and Speech Language Pathologists in Canada. A brief presented to National Health and Welfare, September, 1987.

D12. Canadian Mental Health Association, Manitoba Division. Submission to the Manitoba Health Study of Rehabilitation Services - Community Mental Health Occupational Therapy. June 13, 1989.

D13. Canadian Paraplegic Association, Manitoba Division. Annual Report. 1987.

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D16. Dean E. (1985) Physiotherapy Canada Survey (1973-1982): A Trend to Research. Physiotherapy Canada, 37(3), 158-161.

D17. Derksen, J. The Disabled Consumer Movement: Policy Implications for Rehabilitation Service Provision. Winnipeg, 1980.

D18. Downey, E. The Child Guidance Clinic of Greater Winnipeg: A Joint Education and Mental Health Project. 1981.

D19. Federal/Provincial Advisory Committee on Health Human Resources. Federal/Provincial Report on Rehabilitation Personnel. May, 1988.

D20. Madill, H. M. (1982) Canada's Occupational Therapy Review. Health Management Forum, Spring, 13-19.

D21. Magee, D. J. (1986) Physiotherapy Specialization in Canada: An Update. Physiotherapy Canada, 38(2), 102-105.

D22. Manitoba Athletic Therapists Association. Background Documents: Statistics, Code of Ethics, et al. June, 1989.

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D30. Mobberley, T. H. F., Chairman of the Board, Central Speech and Hearing Clinic. Position Paper: Speech Pathology and Audiology. May 18, 1989.

D31. Morse, M. A History of the Profession of Speech Therapy in the Province of Manitoba. May, 1987.

D32. Nova Scotia College of Physiotherapists and Nova Scotia Branch of the Canadian Physiotherapy Association. Joint Submission to the Nova Scotia Royal Commission on Health Care. May 31, 1988.

D33. Ontario Ministry of Health, Ministry of Colleges and Universities, and Council of Ontario Universities. Report of the Joint Working Group on Rehabilitation Manpower. April, 1988 (unpublished).

D34. Ontario Ministry of Health. Report on the 1985 Survey of Rehabilitation Staff in Ontario. Toronto, October, 1986 (unpublished).

D35. Psychological Association of Manitoba. Handbook for Psychologists. 1988.

D36. Ritchie, P. L., R. F. Wilson, R. Berry, M. Boulay, M. King, and M. Sabourin. (1988) The Funding of Psychological Health Care Services. Canadian Psychology, 29(2), 182-205.

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APPENDIX E

FUNDING SOURCES

AND

PROGRAM DIRECTION

Partial Listing of Funding Sources

and

Program Direction for Rehabilitative Services in Manitoba

Manitoba Health

- Hearing Conservation Program for all age groups.
  - provides hearing screening, diagnostic audiologic assessment, hearing aid evaluation and fitting, and auditory rehabilitation
  - also funds position for teacher of hearing impaired in cooperation with Winnipeg League for the Hard of Hearing
  - provides funding, in the form of a grant to Winnipeg School Division No. 1 for two audiology positions located at Child Guidance Clinic
  - funds part time speech pathology position for pre-school services in Parklands Region
  - administers the High Risk Register for Infant Deafness

- Continuing Care Program (adult disabled)
  - purchases therapy services from Community Therapy Services/South Central Regional Therapy Program

- Mental Health Directorate
  - regional mental health programs
  - Boarding Home Support Program

- Westman Region
  - rural home-based program for pre-school hearing impaired

- Home Care Equipment Pool

Manitoba Health Services Commission

- occupational therapy/physiotherapy/audiology/speech therapy in hospital sector/long term care

- also funds Community Therapy Services which offers the following programs:
  - Rural Hospital Program
  - Personal Home Care Program
  - Home Care Program

- funds South Central Regional Therapy Program

- funds specific prosthetic/orthotic devices and services

- Hearing Aid Program for children under 18
  - provides reimbursement of 80% of the cost of a hearing aid plus services related to fitting it every 4 years in excess of a deductible amount of $75

- Telecommunication devices for the profoundly deaf

Manitoba Education

- Child Care & Development Branch
  - Provision of speech/language therapy services outside Winnipeg for school-age children. Staff may be coordinated through CCDB or school divisions may recruit their own therapists through the utilization of a Clinician grant offered by Education
  - OT's/PT's may be employed by school divisions through the use of the same grant system

Family Services

- key funders of therapy services re: funding to external agencies (eg. Society for Manitobans with Disabilities, CNIB)

- Special Services Unit provides OT/PT service funding for Mobile Therapy Team

- fund speech pathology position (re: pre-school) in Interlake Region

Child Guidance Clinic

- operated by Winnipeg SD #1

- contracts out services to other divisions (except St. James SD). These division purchase service using Manitoba Education funds.

- major employer of speech therapists in Winnipeg

- Manitoba Health funds psychiatric services

St. James School Division

- major employer of speech therapists in Winnipeg

Community Therapy Services

- major funder is MHSC but also obtains funds from Home Care Program (Manitoba Health), Family Services and Medical Services Branch, National Health and Welfare

- provides services to 39 rural hospitals and 75 personal care homes (20 in Winnipeg)

School Therapy Services

- located in Rehabilitation Centre for Children but is operated on a cost recovery basis and contracts out services to school divisions. School divisions generally fund their services through Clinician grants from Manitoba Education.

- Mobile Therapy Team (P.T. and O. T.) services are provided through a "purchased service" agreement with the Association for Community Living - Manitoba. Funding for the service is provided to ACL by Family Services.

Society for Manitobans with Disabilities

- pre-school services - 70% funded by Family Services and 30% by fund raising (United Way, etc)

- PT/OT services - through Community Therapy Services (MHSC funded)

Health Sciences Centre

- Rehabilitation Engineering Department
  - prosthetics/orthotics is operated on a service cost recovery basis
  - Special Devices Program is operated on a cost recovery basis

- H. Dubo - Health Sciences Centre and University of Manitoba
  - outreach program to Swan River, Portage la Prairie, Morden, and Brandon
  - services to St. Boniface/Municipal/Deer Lodge hospitals

- other programs

CNIB

- 50% of funding from Family Services re: VRDP grants

Workers' Compensation Board

Private Physiotherapy Clinics

- clients may include those whose services will be covered through the Manitoba Public Insurance Corporation, Workers' Compensation Board, Department of Veterans' Affairs, third party insurance as well as individuals who have no coverage

Manitoba Public Insurance Corporation

AUDIOLOGY SERVICES IN MANITOBA

AGENCY	WORK YEAR	STAFFING	POPULATION SERVED
CCDB (DEPT. OF ED.)	12 MONTHS	1 AUDIOLOGIST	HEARING IMPAIRED NURSERY-SCHOOL AGED (MANITOBA SCHOOL FOR THE DEAF
HEARING CONSER. (DEPT. OF HEALTH)	12 MONTHS	1 ADMIN. 12 AUDIOLOGISTS 5 AUDIOMETRISTS 1 TEACHER OF THE HEARING IMPAIRED 1 ELECT. TECHNICIAN	ALL AGE GROUPS
HEALTH SCIENCES CENTRE	12 MONTHS	4 AUDIOLOGISTS	ALL AGE GROUPS
ST. BON. HOSPITAL	12 MONTHS	1 AUDIOLOGIST	ALL AGE GROUPS (PRIMARILY CHILDREN)
CHILD GUIDANCE CLINIC	10 MONTHS	2 AUDIOLOGISTS	SCHOOL-AGE CHILDREN (WPG. SCHOOL DIV. #1)
SOCIETY FOR MANITOBANS WITH DISABILITIES	12 MONTHS	1 AUDIOLOGIST	PRESCHOOL CHIDREN ENROLLED IN SMD PROGRAMS

Source: Manitoba Speech and Hearing Association, October 1988.

AGENCIES PROVIDING SPEECH-LANGUAGE SERVICES TO PRESCHOOL CHILDREN

AGENCY	EFT Positions	Number on Waiting List	Length of Time on Waiting List		Place of Res.	
	Preschool	Preschool	Inpatient	Outpatient	Rural	Urban
HOSPITALS						
Brandon General Hospital	1.6	30	N/A	1-3 months	100%	0
Health Sciences Centre	5	257	0-1 month	12-18 months	20%	80%
St. Boniface General Hospital	2**	100	72 hrs.	Peds eval 1-3 months Peds Treat 12-18 months Fluency Grp. 3-6 months Fluency 1:1 18-24 month	5%	95%
Victoria Hospitals	.5 (all ages)	*	N/A	N/A	0	100%
INSTITUTIONS						
St. Amant Centre	.7		0-1 month Consultation	6-12 months Assessments only	Not Available	
GOVERNMENT DEPARTMENT						
Community Services - Interlake	.75	28	6-12 months		100%	0
Health - Parklands	.375	4	1-3 months		100%	0
Community Services - SMDI	4	Not Available			0	100%

* Waiting List not in use
** 1 unfilled position

Source: Manitoba Speech and Hearing Association, October 1988.